

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P-6629-PC	<b>FOR FURTHER ACTION</b> <small>see Form PCT/ISA/220 as well as, where applicable, item 5 below</small>	
International application No. PCT/IL05/00170	International filing date ( <i>day/month/year</i> ) 10 February 2005 (10.02.2005)	(Earliest) Priority Date ( <i>day/month/year</i> ) 17 February 2004 (17.02.2004)
Applicant KERNEL BIOPHAMA INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

**1 Basis of the Report**

a With regard to the language, the international search was carried out on the basis of:



the international application in the language in which it was filed



a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2 ☐ Certain claims were found unsearchable (See Box No. II)

3 ☐ Unity of invention is lacking (See Box No. III)

4 With regard to the title,



the text is approved as submitted by the applicant



the text has been established by this Authority to read as follows:

Please See Continuation Sheet

5. With regard to the abstract,



the text is approved as submitted by the applicant



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6 With regard to the drawings,

a the figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_



as suggested by the applicant.



as selected by this Authority, because the applicant failed to suggest a figure



as selected by this Authority, because this figure better characterizes the invention.



b. none of the figures is to be published with the abstract

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL05/00170

## A. CLASSIFICATION OF SUBJECT MATTER

IPC: C 07 H 21/04; A 01 N 43/04; C 12 Q 1/68; C 12 P 19/34; C 12 N 5/00

USPC: 536/23.1, 24.3, 24.33, 24.5; 514/44; 435/6.91.1, 325, 375

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 536/23 1, 24 3, 24.33, 24 5; 514/44; 435/6.91.1, 325, 375

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- Y	CHIARANTINI et al. Inhibition of Macrophage iNOS by Selective Targeting of Antisense PNA Biochemistry 2002, Vol 41, pages 8471-8477, see Abstract, page 8472, first column, Table 1, and Figure 2	1-7, 9-27, and 29-72
X -- Y	GIOVINE et al. Synthesis and characterization of a specific peptide nucleic acid that inhibits expression of inducible NO synthase FEBS Letters 1998, Vol 426, pages 33-36, see Abstract, page 34 [2.1], and page 35 [3.3]	1-7, 9-27, and 29-72
Y	LEE et al. Receptor mediated uptake of peptides that bind the human transferrin receptor Eur J Biochem 2001, Vol 268, pages 2004-2012, see Abstract.	8 and 28
A	RAY et al. Peptide nucleic acid PNA: its medical and biotechnical applications and promise for the future FASEB J 2000, Vol 14, pages 1041-1060, see entire article, especially Abstract	73-82



Further documents are listed in the continuation of Box C



See patent family annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;"

document member of the same patent family

Date of the actual completion of the international search

09 June 2006 (09.06.2006)

Date of mailing of the international search report

29 JUN 2006

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

Terry C. Gibbs

Telephone No. 571-272-0564

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/IL05/00170

## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	ZHILINA et al. Peptide nucleic acid conjugates: synthesis, properties, and applications. Current Topics in Medicinal Chemistry. 2005, Vol 5, pages 1119-1131, see Abstract.	73-82

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL05/00170

Continuation of Item 4 of the first sheet:

The title shall be short and precise, PCT Rule 4.3, the suggested new title follows: "PEPTIDE-PNA CHIMERA TARGETING INDUCIBLE NITRIC OXIDE SYNTHASE"

Continuation of B. FIELDS SEARCHED Item 3:

CaPlus, EmBase, Medline, NPL, WEST, and STN search

search terms: iNOS, inducible nitric oxide synthase, antisens?, PNA, peptide nucleic acid, chimera?